

Work Order ID 101886***101886***

Page 1

Tuesday, May 21, 2013 9:11:41 AM

Item ID: D3216-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Fitting

Stop

NS2

Start Date: 5/21/2013 Start Qty: 12.00

12

Cust Item ID:

Required Date: 5/24/2013 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: CLDate: 13/05/12 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence	Operate Description	Set Up/ Run Hours	Tool ID	Tool Code	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3216

Rev A

100

0.00

100

FLOW WATER JET

Waterjet

0.00

FLOW CNC Waterjet

304 .125"Memo
1-Cut as per Dwg D3216 Dwg Rev: A Prog Rev: A 2-
Deburr if necessary12 φ JM/A 13.05.12

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

0.00

Quality Control

12 o JM/B 13.05.12

120

0.00

120

QC8- Inspect parts - second check

QC

0.00

Quality Control

AS
21
BS 2812

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS						
			Rework Scrap Use-as-is Work Order Update	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Skid-tube Machining Thermoforming Large Fab	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Crosstube Small Fab Finishing Composite	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Water Jet Prod. Eng. Coor. Rec/Store/Packaging	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Engineering Quality Other
Part No. _____ NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other							

Work Order ID 101886

Tuesday, May 21, 2013 9:11:42 AM

101886

Page 2

Item ID: D3216-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Fitting

Stop

NS2

Start Date: 5/21/2013 **Start Qty:** 12.00

12

Cust Item ID:

Required Date: 5/24/2013 **Req'd Qty:** 12.00

12

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Small Fab	Small Fab	0.00							12 06/13 5:29
	Memo	0.00							
	Tumble until parts have a polished finish.								

140 *140* QC	QC5- Inspect part completeness to step on W/O	0.00	BS 30	12
Quality Control	Memo	0.00		

150 *150* Packaging	Identify as per dwg & Stock Location: <i>STO34</i>	0.00		Dx
Packaging	Memo	0.00		<i>13-5-30</i>

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS					
		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	
Part No. _____		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
NCR No. _____		Work Order Update <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			Other <input type="checkbox"/>			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data <input type="checkbox"/>										
Equip/Tooling <input type="checkbox"/>										
Operator <input type="checkbox"/>										
Material <input type="checkbox"/>										
Setup <input type="checkbox"/>										
Other <input type="checkbox"/>										
Process <input type="checkbox"/>										
Supplier <input type="checkbox"/>										
Training <input type="checkbox"/>										
Unapproved <input type="checkbox"/>										
FAULT CATEGORY										
<input checked="" type="checkbox"/> Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other						

Work Order ID 101886

Tuesday, May 21, 2013 9:11:42 AM

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Page 3

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Item Name: Fitting

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NS2

Start Date: 5/21/2013 **Start Qty:** 12.00

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Cust Item ID:

Required Date: 5/24/2013 **Req'd Qty:** 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty.**

**Reject
Qty.**

**Reject
Number**

**Insp.
Stamp**

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Quality Control

Memo

0.00

13/5/31/18

MF

13-5-30

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS								
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other						
Part No. _____ NCR No. _____													
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data													
Equip/Tooling													
Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training													
Unapproved													
FAULT CATEGORY													
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	

Picklist Print

Tuesday, May 21, 2013 9:11:41 AM

Page 1

Work Order ID: 101886

Parent Item: D3216-1

Parent Item Name: Fitting

Start Date: 5/21/2013

Required Date: 5/24/2013

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: A03.10.28New IssueKJ/RF
IPP Rev:B Now on Waterjet 06-07-03 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S11GA 304/316 0.125 Sheet		Purchased	No			100	sf	160.7933	0.0288	0.3637895		JM/Ae 13.05.27	

Location	Loc Qty	Loc Code
MAT020	160.7932632	
122521	19 1432632	
124445	141.65	<u>124445</u>

0.4

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: Date:

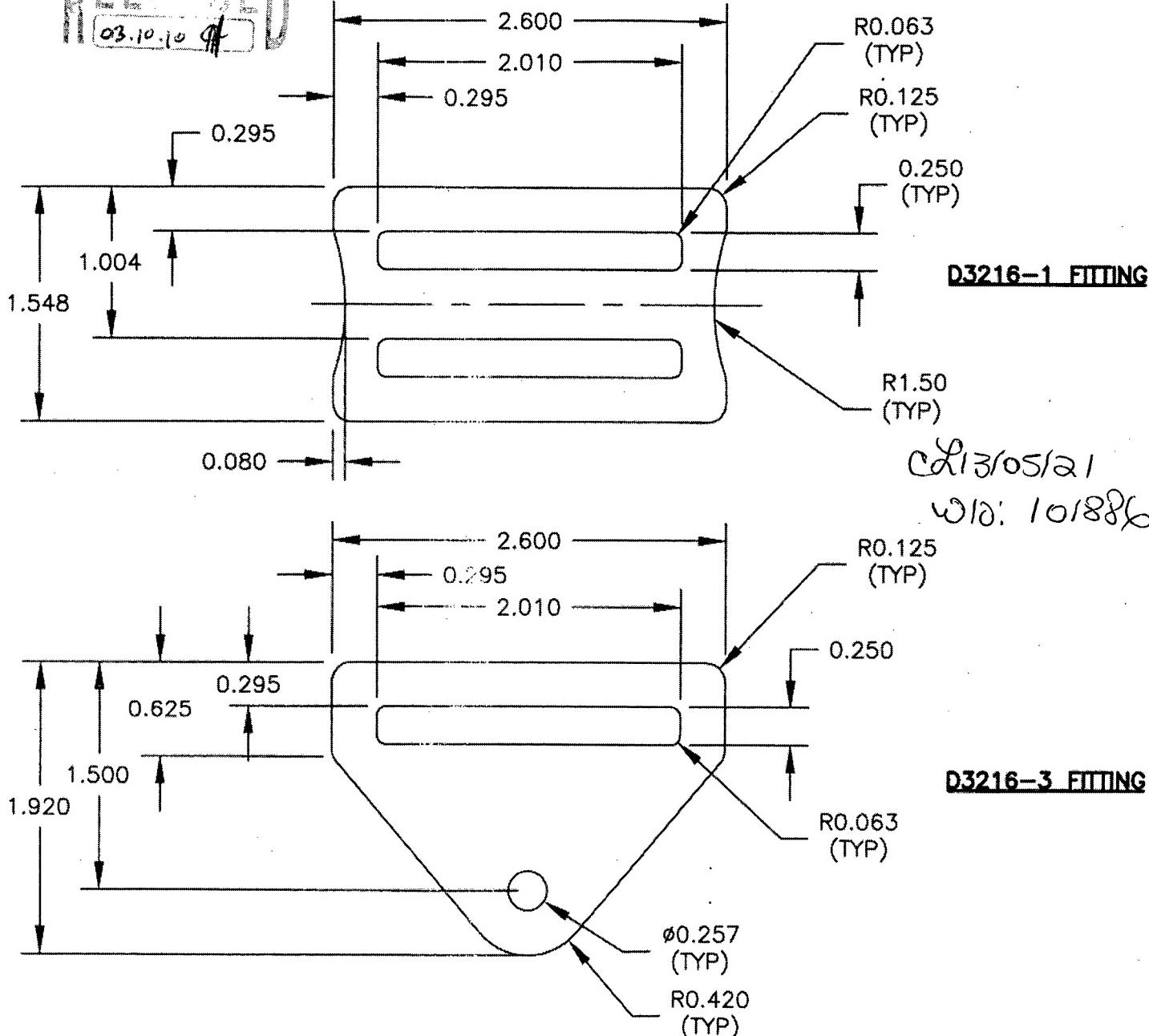
Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
				Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending				Bend <input type="checkbox"/>	Grain <input type="checkbox"/>			Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>		
Centre Not Concentric to O/S				BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>			Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>		
Cracks				Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>			Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>		
Crushed/Crimped				Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>			Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>		
Cuffs				Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>			Part Moved <input type="checkbox"/>			
Heat Treat				Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>			Positioned Wrong <input type="checkbox"/>			
Inspection Strip in Tube				Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>			Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>		
Ripples in Bend				Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>						
Torque Waves in Extrusion				Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>						
Turning Sequence				Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>						
Wave/Twist in Tube				Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>						



1 COPY
100%
DRAFT

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3216
DATE	TITLE	REV. A SHEET 1 OF 1 SCALE 1:1
03.09.26	FITTING	
A	03.09.26	NEW ISSUE

RELEASED
03.10.10 AF



D3216-1/-3 FITTING

- 1) MATERIAL: AISI 304/316 PLATE, 0.125 THICK (REF DART SPEC: M304S11GA)
- 2) FINISH: MOLECRO POLISH
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

DART AEROSPACE LTD	Work Order:	101886
Description: Fitting	Part Number:	D3216-1
Inspection Dwg: D3216 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

AS

Measured by:	Jm	Audited by:	21 9-6	Prototype Approval:	N/A
Date:	13-5-27	Date:	13-5-28	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.11.23	New Issue	KJ/EC/DD	